

STEIN, Howard (1929–)

Howard Stein was born on 21 January 1929 in New York City. He received his BA from Columbia in 1947. At the University of Chicago he did graduate work in philosophy with Rudolf CARNAP, among others, and received his PhD in philosophy in 1958. His dissertation, "An Examination of Some Aspects of Natural Science," addressed a question of Erwin Schrödinger's about the bearing of fundamental physics on philosophical questions concerning life and determinism. He then earned an MS in mathematics, which was awarded in 1959. Stein was an instructor and assistant professor in the natural sciences at Chicago until 1958, held a National Science Foundation fellowship in 1958–9, and taught mathematics at Brandeis from 1959 to 1962. From 1962 to 1967 he worked at Honeywell Inc. as a mathematician, a systems analyst, and an engineer. Stein rejoined the academic world in 1967 as professor of philosophy at Case Western Reserve University in Cleveland. In 1973 he moved to Columbia University as professor of philosophy. From 1980 until his retirement in 2000 he was a professor of philosophy and a member of the committee on the conceptual foundations of science at the University of Chicago. He held a Guggenheim Fellowship in 1974–5, and is a fellow of the American Academy of Arts and Sciences.

In Stein's writings, deep and perennial questions of philosophy are approached by extremely careful readings of scientific texts from antiquity to the twentieth century, in a style that is much denser and more literary than is customary among anglophone philosophers. The result is a new, clearer view of the problems, while established "isms" come to seem coarse and irrelevant.

Stein's contributions to our understanding of Newtonian space-time structure, classical field theory, and the "measurement problem" in quantum mechanics are widely appreciated. Less so are his complex and illuminating discussions of the realist/instrumentalist debate,

the legacy of logical empiricism, and other central issues in the philosophy of science. This is unfortunate, as Stein's work, though more austere, addresses the same broad themes as much better-known figures, such as W. V. QUINE, Thomas KUHN, Adolf GRÜNBAUM, or Hilary PUTNAM. Though Stein has occasionally pointed out fundamental misunderstandings in such philosophers' understanding of scientific ideas, the precision of his approach has sometimes given the misleading impression that only minor technical details are at stake. His point, however, in these critical writings as elsewhere, is that justice can only be done to the larger questions traditionally addressed by philosophers if their consideration is *preceded* by an adequate understanding of the constraints imposed by scientific knowledge.

Though Stein has written wide-ranging papers on subjects of general interest, these masterpieces of compression often rely on the perspective developed in the more historical or technical papers. The unity of his work is further obscured by its publication in far-flung, often quite obscure conference volumes. On the other hand, though it affords broad vistas, Stein's thought does not, by its very nature, lend itself to exposition in the form of systematic treatises; it is inherently dialogical, questioning, polyphonic. It is to be hoped that the forthcoming collections of his papers will make the unity of his thought more evident and his work more widely accessible.

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- "Yes, But ... : Some Skeptical Reflections on Realism and Anti-realism," *Dialectica* 43 (1989): 47–65.
- "Was Carnap Entirely Wrong, After All?" *Synthese* 93 (1992): 275–95.

- “Some Reflections on the Structure of our Knowledge in Physics,” in *Logic, Philosophy, and Methodology of Science IX*, ed. Dag Prawitz, Brian Skyrms, and Dag Westerst¹ (New York, 1994), pp. 633–55.
- “Newton’s Metaphysics,” in *The Cambridge Companion to Newton*, ed. I. B. Cohen and G. E. Smith (Cambridge, UK, 2002), pp. 256–307.
- “The Enterprise of Understanding and the Enterprise of Knowledge,” *Synthese* 140 (2004): 135–76.

Further Reading

- Shimony, Abner. “The Character of Howard Stein’s Work in Philosophy and History of Physics,” in *Reading Natural Philosophy: Essays in the History and Philosophy of Science and Mathematics*, ed. David Malament (LaSalle, Ill., 2002), pp. 1–8. This volume also contains a bibliography of Stein’s writings.

André Carus

STEPHENSON, William (1902–89)

William Stephenson was born on 14 May 1902 in Chopwell, County Durham, England, and died on 14 June 1989 in Columbia, Missouri. He was educated in physics at the University of Durham (BSc 1923, MSc 1925, PhD 1927), where study for the diploma in theory and practice of teaching brought him into contact with Godfrey Thomson, one of the pioneers of factor analysis. Inspired by this encounter to explore the application of factor analysis to the study of mind, Stephenson moved in 1926 to University College London to study psychology with Charles Spearman and work as research assistant to Spearman and also to Cyril Burt.

In the 1930s Stephenson became a central figure in the development of and debates about psychometrics and factor analysis. He also became interested in psychoanalysis; and to help raise the research profile of psychoanalysis in the United Kingdom, he was selected in 1935 to begin analysis with Melanie Klein. In 1936 he accepted appointment as assistant director of the newly established Oxford Institute of Experimental Psychology. During World War II he served as a civilian consultant on personnel matters to the British armed forces and from 1943 as a military consultant to the Director General, Medical Services and the Director General of Military Training, rising to the rank of Brigadier-General. He became reader in experimental psychology in 1942 and successor to William Brown as Director of the Institute of Experimental Psychology in 1945.

After failing to secure the first Oxford Chair in Psychology (filled by George Humphrey in 1947), Stephenson emigrated to the United States in 1948, first to the University of Chicago as a visiting professor of psychology and then in 1955, when a permanent academic post at Chicago was not forthcoming, to Greenwich, Connecticut, as research director of a leading market research firm, Nowland & Co. In 1958 he finally obtained a distinguished professorship in advertising research at the School of Journalism of the University of Missouri at Columbia, where he remained until his retirement in 1972.

Stephenson’s ideas developed under a number of important intellectual influences in addition to those having to do with factor analysis. Following the transactionalism of John DEWEY and Arthur BENTLEY and the interbehaviorism of Jacob KANTOR, he rejected Cartesian mind–body dualism. Heavily influenced by Kurt KOFFKA and Erving GOFFMAN, he developed a functional and processive theory of self. Chicago’s social sciences had maintained some of the functionalism and pragmatism of earlier years when George H. MEAD dominated, and was mutually receptive